Amendment dated: June 21, 2004

Response to Office Action dated: February 20, 2004

Amendments to the Specification:

Please replace the paragraph beginning at line 6, page 1, with the following amended paragraph:

The present invention relates to a color space quantization descriptor structure for

performing quantization of a color space in order to search a multimedia based on contents

when multimedia feature information is color information, in particular to a color space

quantization descriptor structure comprising quantization description information which has a

tree structure divided into a plurality steps of superior color spaces and subordinate color spaces,

and the tree structure recurrently recursively includes a plurality of subordinate color spaces.

Please replace the paragraph beginning at line 19, page 5, with the following amended paragraph:

In order to achieve the above-mentioned objects, a color space quantization descriptor

structure comprises quantization description information of the color space which has a tree

structure divided into a plurality of superior color spaces and subordinate color spaces, and the

tree structure recurrently recursively comprises a plurality of the subordinate color spaces in

order to search the multimedia based on the contents when the multimedia is represented by the

color information and the target of the multimedia search is the moving image or still image.

Please replace the paragraph beginning at line 19, page 10, with the following amended paragraph:

In addition, in the color space quantization descriptor 201, the one quantization

descriptor recurrently recursively comprises a plurality of quantization descriptors 201.

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Please replace the paragraph beginning at line 25, page 10, and bridging page 11, with the following amended paragraph:

Meanwhile, the quantization descriptor 201 recurrently recursively describes the dimensions of the color space and the color space quantization descriptor 201 when the present color space is divided non-uniformly.

Please replace the paragraph beginning at line 15, page 11, with the following amended paragraph:

In addition, the quantization descriptor 301 recurrently recursively comprises the color space quantization descriptor or uniform quantization descriptor 303.

Please replace the two consecutive paragraphs beginning at line 24, page 11, bridging and ending on page 12, with the following amended paragraphs:

In other words, it is determined whether the color space quantization descriptor is described recurrently recursively below the present color space quantization descriptor or uniform quantization descriptor is described below the present color space quantization descriptor.

Accordingly, when the quantization type is uniform, the uniform quantization descriptor 303 is described more than 1 but less than the number of the component (num-component), the recurrent recursive color space descriptor is not comprised.

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Please replace the paragraph beginning at line 22, page 13, with the following amended paragraph:

The quantization descriptor 401 comprises a quantization type (quantization_type), component number (num_component), and comprises recurrently recursively the color space quantization descriptor or uniform quantization descriptor 403 in accordance with the

quantization type.

Please replace the two consecutive paragraphs beginning at line 8, page 14, with the following amended

paragraphs:

In other words, it is determined whether the color space quantization descriptor is

described recurrently recursively below the present color space quantization descriptor or

uniform quantization descriptor is described below the present color space quantization

descriptor in accordance with the quantization type of the quantization descriptor 401.

Accordingly, when the quantization type is uniform, the uniform quantization descriptor

403 is described as same as the component umber (num_component), and the recurrent

recursive color space descriptor is not comprised.

Please replace the paragraph beginning at line 8, page 17, with the following amended paragraph:

About the subordinate color space of the step B, the step C subordinate color space

description information about the each V=200 \sim V=255, V=100 \sim V=200, V=0 \sim V=100 is

recurrently recursively described, and the component range information is described more than

1 and less than 3.

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Response to Office Action dated: February 20, 2004

Please replace the paragraph beginning at line 2, page 25, with the following amended paragraph:

FIG. 7 illustrates the example of the three-step quantization of H, S, V color space in accordance with FIG. 5. In other words, FIG. 7 illustrates it is possible to perform a scalable subordinate color space usage about the color space quantization of FIG. 5 through the recurrent recursive tree structure quantization according to the present invention.

Please replace the paragraph beginning at line 16, page 26, with the following amended paragraph:

In addition, the color space quantization descriptor 801 recurrently recursively comprises a plurality of color space quantization descriptors 801, and therefore the color space quantization descriptor 801 can have a recurrent recursive tree structure.

Please replace the paragraph beginning at line 3, page 27, with the following amended paragraph:

As described in FIG. 9, a quantization descriptor 901 comprises quantization type information (quantization_type), information about number of component (nun_component), and information about number of subordinate color space (num_subspaces). In addition, the quantization descriptor 901 recurrently recursively has color space quantization descriptor at least 0 and not greater than the number of subordinate color space (num_subspaces), and has a uniform quantization descriptor 902 or a non-uniform quantization descriptor 904 in accordance with the quantization type.